

TOWN OF AMHERST, NEW YORK

HAZARD ANALYSIS REPORT

2011 REVISION

James J. Zymanek, Director
Town of Amherst Emergency Services
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On **April 28, 2011**, the Town of Amherst conducted a revision to our hazard analysis using the automated program, *HAZNY* (Hazards New York). *HAZNY* was developed by the American Red Cross and the New York State Emergency Management Office. The results of this hazard analysis are presented in this report.

HAZNY and the Town of Amherst

HAZNY is an automated interactive spreadsheet that asks specific questions on potential hazards in a community and records and evaluates the responses to these questions. *HAZNY* also includes historical and expert data on selected hazards. *HAZNY* is designed specifically for groups, rather than individual use. Town of Amherst assembled a group of local officials to consider and discuss the questions and issues raised by the *HAZNY* program. Representatives from (Enter what agency facilitated the workshop) facilitated the meeting and recorded the results.

The Results

The Group analyzed hazards potentially affecting (the) Town of Amherst. *HAZNY* rated each hazard based on the Group's assessment and assigned a numerical value.

These values are categorized as follows:

- **321 to 400** **HIGH HAZARD**
- **241 to 320** **MODERATELY HIGH HAZARD**
- **161 to 240** **MODERATELY LOW HAZARD**
- **4 to 160** **LOW HAZARD**

The Group rated the 22 hazards as follows:

Hazard	Rating
SOIL SUBSIDENCE	271
EARTHQUAKE	258
FIRE	244
TRANS ACCIDENT	236
TERRORISM	231
ICE STORM	226
SEVERE STORMS	226
FLOOD	218
HAZMAT (IN TRANSIT)	218
INFESTATION	218
STRUCTURAL COLLAPSE	217
SEVERE STORM	216
UTILITY FAILURE	204
RADIOLOGICAL (IN TRANSIT)	194
EXTREME TEMPS	174
HAZMAT (FIXED SITE)	172
MINE COLLAPSE	168
TORNADO	164
WATER SUPPLY CONTAMINATION	141
FOOD SHORTAGE	130
FUEL SHORTAGE	130
ICE JAM	130

Hazard(s) rated as Moderately High: SOIL SUBSIDENCE, EARTHQUAKE, FIRE.

SOIL SUBSIDENCE: 271, Moderately High Hazard

Potential Impact: Several locations
Cascade Effects: Some potential
Frequency: A regular event
Onset: No warning
Hazard Duration: Two to three days
Recovery Time: More than two weeks
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Severe damage to private property.
- ♦ Moderate structural damage to public facilities.

EARTHQUAKE: 258, Moderately High Hazard

Potential Impact: Throughout a large region
Cascade Effects: Highly likely
Frequency: A rare event
Onset: No warning
Hazard Duration: One day
Recovery Time: More than two weeks
Impact:

- ♦ Serious injury or death to large numbers.
- ♦ Severe damage to private property.
- ♦ Severe structural damage to public facilities.

FIRE: 244, Moderately High Hazard

Potential Impact: Single location
Cascade Effects: Some potential
Frequency: A frequent event
Onset: No Warning
Hazard Duration: Less Than One Day
Recovery Time: One to Two Days
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Moderate damage to private property.
- ♦ Moderate structural damage to public facilities.

Hazard(s) rated as moderately low: TRANS ACCIDENT, TERRORISM, ICE STORM, SEVERE STORMS, FLOOD, HAZMAT (IN TRANSIT), INFESTATION, STRUCTURAL COLLAPSE, SEVERE STORM, UTILITY FAILURE, RADIOLOGICAL (IN TRANSIT), EXTREME TEMPS, HAZMAT (FIXED SITE), MINE COLLAPSE, TORNADO

TRANS ACCIDENT: 236, Moderately Low Hazard

Potential Impact: Single Location
Cascade Effects: Some Potential
Frequency: A Frequent Event
Onset: No Warning
Hazard Duration: Less Than One Day
Recovery Time: One to Two Days
Impact: ♦ Serious injury or death is likely, but not in large numbers.
♦ Little or no damage to private property.
♦ Little or no structural damage to public facilities.

TERRORISM: 231, Moderately Low Hazard

Potential Impact: Several Locations
Cascade Effects: Some Potential
Frequency: A Regular Event
Onset: No Warning
Hazard Duration: Less Than One Day
Recovery Time: More than two weeks
Impact: ♦ Serious injury or death is likely, but not in large numbers.
♦ Little or no damage to private property.
♦ Little or no structural damage to public facilities.

ICE STORM: 226, Moderately Low Hazard

Potential Impact: Throughout a Large Region
Cascade Effects: Some Potential
Frequency: A Regular Event
Onset: Several Days Warning
Hazard Duration: Two to Three Days
Recovery Time: More than two weeks
Impact: ♦ Serious injury or death is likely, but not in large numbers
♦ Moderate damage to private property.
♦ Little or no structural damage to public facilities.

SEVERE STORMS: 226, Moderately Low Hazard

Potential Impact: Throughout a Large Region
Cascade Effects: Some Potential
Frequency: A Regular Event
Onset: Several Days Warning
Hazard Duration: Two to Three Days

Recovery Time: More Than Two Weeks
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Moderate damage to private property.
- ♦ Moderate structural damage to public facilities.

FLOOD: 218, Moderately Low Hazard

Potential Impact: Several Locations
Cascade Effects: Some Potential
Frequency: A Frequent Event
Onset: Several Days Warning
Hazard Duration: Two to Three Days
Recovery Time: Three Days to One Week
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Moderate damage to private property.
- ♦ Little or no structural damage to public facilities.

HAZMAT (IN TRANSIT): 218, Moderately Low Hazard

Potential Impact: Throughout a Small Region
Cascade Effects: Some Potential
Frequency: An Infrequent Event
Onset: No Warning
Hazard Duration: One Day
Recovery Time: Three Days to One Week
Impact:

- ♦ Serious injury or death to large numbers.
- ♦ Moderate damage to private property.
- ♦ Little or no structural damage to public facilities.

INFESTATION: 218, Moderately Low Hazard

Potential Impact: Several Locations
Cascade Effects: Some Potential
Frequency: A Regular Event
Onset: Several Days Warning
Hazard Duration: More Than One Week
Recovery Time: More than two weeks
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Moderate damage to private property.
- ♦ Moderate structural damage to public facilities.

STRUCTURAL COLLAPSE: 217, Moderately Low Hazard

Potential Impact: Single Location
Cascade Effects: Some Potential
Frequency: An Infrequent Event
Onset: No Warning
Hazard Duration: Two to Three Days
Recovery Time: More than two weeks
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Severe damage to private property.

- ◆ Little or no structural damage to public facilities.

SEVERE STORM: 216, Moderately Low Hazard

Potential Impact: Throughout a Large Region
Cascade Effects: Some Potential
Frequency: A Regular Event
Onset: Several Days Warning
Hazard Duration: Two to Three Days
Recovery Time: One to Two Weeks
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Moderate damage to private property.
- ♦ Moderate structural damage to public facilities.

UTILITY FAILURE: 204, Moderately Low Hazard

Potential Impact: Several Locations
Cascade Effects: Some Potential
Frequency: An Infrequent Event
Onset: No Warning
Hazard Duration: Less Than One Day
Recovery Time: More than two weeks
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Moderate damage to private property.
- ♦ Moderate structural damage to public facilities.

RADIOLOGICAL (IN TRANSIT): 194, Moderately Low Hazard

Potential Impact: Single Location
Cascade Effects: Some Potential
Frequency: A Regular Event
Onset: No Warning
Hazard Duration: Less Than One Day
Recovery Time: Less Than One Day
Impact:

numbers.

- ♦ Serious injury or death is likely but not in large
- ♦ Little or no damage to private property
- ♦ Little or no structural damage to public facilities

EXTREME TEMPS: 174, Moderately Low Hazard

Potential Impact: Throughout a large region
Cascade Effects: Some potential
Frequency: An Infrequent Event
Onset: Several Days Warning
Hazard Duration: Two to Three Days
Recovery Time: Three Days to One Week
Impact:

numbers.

- ♦ Serious injury or death is likely but not in large
- ♦ Moderate damage to private property.
- ♦ Little or no structural damage to public facilities.

HAZMAT (FIXED SITE): 172, Moderately Low Hazard

Potential Impact: Several Locations
Cascade Effects: Some Potential
Frequency: An Infrequent Event
Onset: No Warning
Hazard Duration: Less Than One Day
Recovery Time: Three Days to One Week
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Little or no damage to private property.
- ♦ Little or no structural damage to public facilities.

MINE COLLAPSE: 168, Moderately Low Hazard

Potential Impact: Single Location
Cascade Effects: Highly Likely
Frequency: A Rare Event
Onset: No Warning
Hazard Duration: Less Than One Day
Recovery Time: One to Two Days
Impact:

numbers.

- ♦ Serious injury or death is likely, but not in large
- ♦ Severe damage to private property
- ♦ Moderate structural damage to public facilities.

TORNADO: 164, Moderately Low Hazard

Potential Impact: Throughout a Large Region
Cascade Effects: Highly Likely
Frequency: A Rare Event
Onset: Several Hours Warning
Hazard Duration: Less Than One Day
Recovery Time: One to Two Weeks
Impact:

facilities.

- ♦ Serious injury or death unlikely.
- ♦ Moderate damage to private property.
- ♦ Moderate structural damage to public

Hazard(s) rated as low: WATER SUPPLY CONTAMINATION, FOOD SHORTAGE, FUEL SHORTAGE, ICE JAM

WATER SUPPLY CONTAMINATION: 141, Low Hazard

Potential Impact: Single Location
Cascade Effects: Some Potential
Frequency: A Rare Event
Onset: No Warning
Hazard Duration: Less Than One Day
Recovery Time: More than two weeks
Impact:

- ♦ Serious injury or death unlikely.

facilities.

- ♦ Little or no damage to private property.
- ♦ Little or no structural damage to public

FOOD SHORTAGE: 130, Low Hazard

Potential Impact: Throughout a Small Region
Cascade Effects: Some Potential
Frequency: A Rare Event
Onset: More Than One Week Warning
Hazard Duration: More Than One Week
Recovery Time: More than two weeks
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Moderate damage to private property.
- ♦ Little or no structural damage to public

facilities.

FUEL SHORTAGE: 130, Low Hazard

Potential Impact: Throughout a Small Region
Cascade Effects: Some Potential
Frequency: A Rare Event
Onset: More Than One Week Warning
Hazard Duration: More Than One Week
Recovery Time: More than two weeks
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Moderate damage to private property.
- ♦ Little or no structural damage to public

facilities.

ICE JAM: 130, Low Hazard

Potential Impact: Several Locations
Cascade Effects: Some Potential
Frequency: An Infrequent Event
Onset: More Than One Week Warning
Hazard Duration: Two to Three Days
Recovery Time: One to Two Weeks
Impact:

- ♦ Serious injury or death unlikely.
- ♦ Little or no damage to private property.
- ♦ Little or no structural damage to public

facilities.

Biggest Hazards

HAZARDS THAT OCCUR WITH NO WARNING*
SOIL SUBSIDENCE
EARTHQUAKE
FIRE
TRANS ACCIDENT

TERRORISM
HAZMAT (IN TRANSIT)
STRUCTURAL COLLAPSE
UTILITY FAILURE
RADIOLOGICAL (IN TRANSIT)
HAZMAT (FIXED SITE)
MINE COLLAPSE
WATER SUPPLY CONTAMINATION

HAZARDS THAT OCCUR MOST OFTEN*

FIRE
TRANS ACCIDENT
FLOOD

HAZARDS THAT PRESENT THE GREATEST THREAT TO LIFE*

EARTHQUAKE
HAZMAT (IN TRANSIT)

Figure 1. Chart of Hazards vs. Ratings

